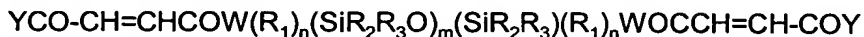
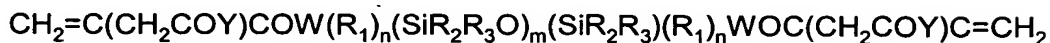


What is claimed is:

1. A prepolymer selected from the group consisting of functionalized compounds having the following formula:

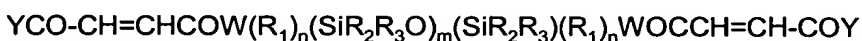


and



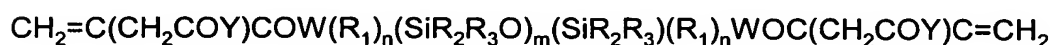
wherein R_1 is selected from the group consisting of alkylenes and alkylenes containing ether linkages, R_2 and R_3 are independently selected from the group consisting of alkyl groups, phenyl groups, alkyl groups substituted with halogen, phenyl groups substituted with halogen, alkyl groups containing ether linkages and phenyl groups containing ether linkages, W is O or NH , n is an integer between 1 and 10, m is an integer between 2 and 200, and Y is a residue having a reactive functional group selected from the group consisting of hydroxyl, carboxyl, oxazolone, epoxy and anhydride functional groups with the proviso that when W is O , Y is not a residue of diethanolamine.

2. The prepolymer of claim 1 wherein R_1 contains 1-10 carbon atoms.
3. The prepolymer of claim 1 wherein the functionalized compound has the following formula:



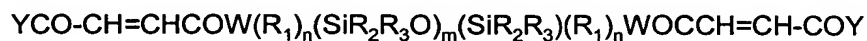
wherein R_1 is selected from the group consisting of alkylenes and alkylenes containing ether linkages, R_2 and R_3 are methyl, n is 3 or 4, m is an integer between 5 and 200, W is O and Y is OH and is in a *trans* configuration.

4. The prepolymer of claim 1 wherein the functionalized compound has the following formula:



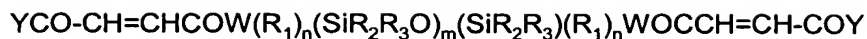
wherein R_1 is selected from the group consisting of alkylenes and alkylenes containing ether linkages, R_2 and R_3 are methyl, n is 3 or 4, m is an integer between 5 and 100, W is O and Y is OH.

5. The prepolymer of claim 1 wherein the functionalized compound has the following formula:

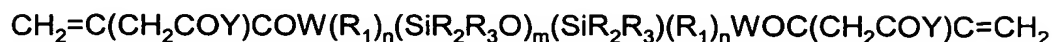


wherein R_1 is selected from the group consisting of alkylenes and alkylenes containing ether linkages, R_2 and R_3 are methyl, n is 3 or 4, m is an integer between 5 and 200, W is O and Y is OH and is in a *cis* configuration.

6. A copolymer prepared by polymerizing a monomer mixture comprising,
(A) 20 to 80 weight % of at least one prepolymer selected from the group consisting of compounds having the following formula:



and



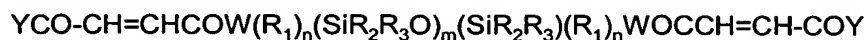
wherein R_1 is selected from the group consisting of alkylenes and alkylenes containing ether linkages, R_2 and R_3 are independently selected from the group consisting of alkyl groups, phenyl groups, alkyl groups substituted with halogen, phenyl groups substituted with halogen, alkyl groups containing ether linkages and phenyl groups containing ether linkages, W is O or NH, n is an integer between 1 and 10, m is an integer between 2 and 200, and Y is a residue having a reactive functional group selected from the group consisting of hydroxyl, carboxyl, oxazolone, epoxy and anhydride functional groups with the proviso that when W is O, Y is not a residue of diethanolamine, and

(B) 5 to 50 weight % of at least one copolymerizable device-forming monomer.

7. The copolymer of claim 6 wherein the monomer mixture comprises:

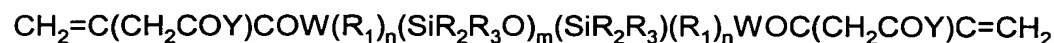
10 to 50 weight % of at least one additional silicone-containing monomer and 10 to 50 weight % of at least one copolymerizable device-forming hydrophilic monomer.

8. The copolymer of claim 6 wherein component (A) has the following formula:



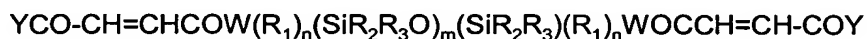
wherein R_1 is selected from the group consisting of alkylenes and alkylenes containing ether linkages, R_2 and R_3 are methyl, n is 3 or 4, m is an integer between 5 and 200, W is O and Y is OH and is in a *trans* configuration.

9. The copolymer of claim 6 wherein component (A) has the following formula:



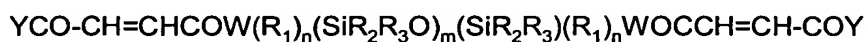
wherein R_1 is selected from the group consisting of alkylenes and alkylenes containing ether linkages, R_2 and R_3 are methyl, n is 3 or 4, m is an integer between 5 and 200, W is O and Y is OH.

10. The copolymer of claim 6 wherein component (A) has the following formula:



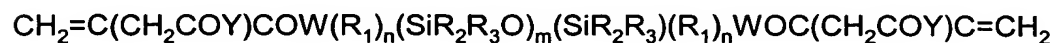
wherein R_1 is selected from the group consisting of alkylenes and alkylenes containing ether linkages, R_2 and R_3 are methyl, n is 3 or 4, m is an integer between 5 and 100, W is O and Y is OH and is in a *cis* configuration.

11. The copolymer of claim 7 wherein component (A) has the following formula:



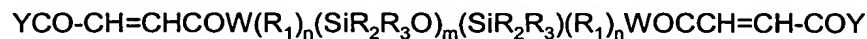
wherein R_1 is selected from the group consisting of alkylenes and alkylenes containing ether linkages, R_2 and R_3 are methyl, n is 3 or 4, m is an integer between 5 and 100, W is O and Y is OH and is in a *trans* configuration.

12. The copolymer of claim 7 wherein component (A) has the following formula:



wherein R_1 is selected from the group consisting of alkylenes and alkylenes containing ether linkages, R_2 and R_3 are methyl, n is 3 or 4, m is an integer between 5 and 100, W is O and Y is OH.

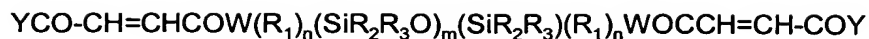
13. The copolymer of claim 7 wherein component (A) has the following formula:



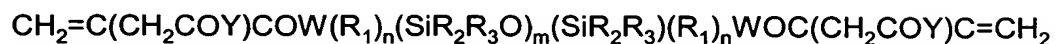
wherein R_1 is selected from the group consisting of alkylenes and alkylenes containing ether linkages, R_2 and R_3 are methyl, n is 3 or 4, m is an integer between 5 and 100, W is O and Y is OH and is in a *cis* configuration.

14. A medical device comprising a copolymer prepared by polymerizing a monomer mixture comprising, as main components,

(A) 20 to 80 weight % of at least one prepolymer selected from the group consisting of compounds having the following formula:



and

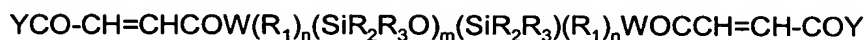


wherein R_1 is selected from the group consisting of alkylenes and alkylenes containing ether linkages, R_2 and R_3 are independently selected from the group consisting of alkyl groups, phenyl groups, alkyl groups substituted with halogen, phenyl groups substituted with halogen, alkyl groups containing ether linkages and phenyl groups containing ether linkages, W is O or NH , n is an integer between 1 and 10, m is an integer between 2 and 200, and Y is a residue having a reactive functional group selected from the group consisting of hydroxyl, carboxyl, oxazolone, epoxy and anhydride functional groups with the proviso that when W is O , Y is not a residue of diethanolamine, and

(B) 5 to 50 weight % of at least one copolymerizable device-forming monomer.

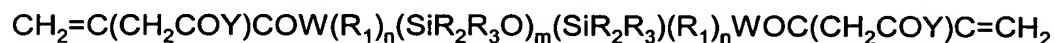
15. The medical device of claim 14 wherein the monomer mixture comprises:
10 to 50 weight % of at least one additional silicone-containing monomer
hydrophilic monomer and 10 to 50 weight % of at least one copolymerizable
device-forming hydrophilic monomer.

16. The medical device of claim 14 wherein component (A) has the following formula:



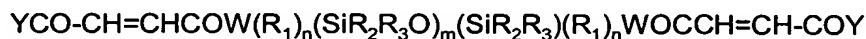
wherein R₁ is selected from the group consisting of alkylenes and alkylenes containing ether linkages, R₂ and R₃ are methyl, n is 3 or 4, m is an integer between 5 and 100, W is O and Y is OH and is in a *trans* configuration.

17. The medical device of claim 14 wherein component (A) has the following formula:



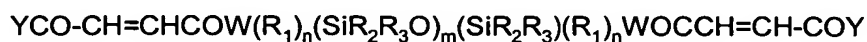
wherein R₁ is selected from the group consisting of alkylenes and alkylenes containing ether linkages, R₂ and R₃ are methyl, n is 3 or 4, m is an integer between 5 and 100, W is O and Y is OH.

18. The medical device of claim 14 wherein component (A) has the following formula:



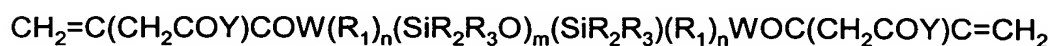
wherein R₁ is selected from the group consisting of alkylenes and alkylenes containing ether linkages, R₂ and R₃ are methyl, n is 3 or 4, m is an integer between 5 and 100, W is O and Y is OH and is in a *cis* configuration.

19. The medical device of claim 15 wherein component (A) has the following formula:



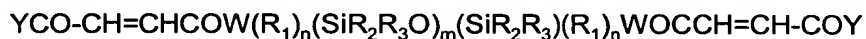
wherein R_1 is selected from the group consisting of alkylenes and alkylenes containing ether linkages, R_2 and R_3 are methyl, n is 3 or 4, m is an integer between 5 and 100, W is O and Y is OH and is in a *trans* configuration.

20. The medical device of claim 15 wherein component (A) has the following formula:



wherein R_1 is selected from the group consisting of alkylenes and alkylenes containing ether linkages, R_2 and R_3 are methyl, n is 3 or 4, m is an integer between 5 and 100, W is O and Y is OH.

21. The medical device of claim 15 wherein component (A) has the following formula:



wherein R_1 is selected from the group consisting of alkylenes and alkylenes containing ether linkages, R_2 and R_3 are methyl, n is 3 or 4, m is an integer between 5 and 100, W is O and Y is OH and is in a *cis* configuration.

22. The medical device of claim 14 wherein the medical device is selected from the group consisting of heart valves, intraocular lenses, contact lenses, intrauterine devices, vessel substitutes, artificial ureters and artificial breast tissue.

23. The medical device of claim 22 wherein the medical device is a contact lens.

24. The medical device of claim 23 wherein the medical device is a soft contact lens.

25. The medical device of claim 15 wherein the medical device is selected from the group consisting of heart valves, intraocular lenses, contact lenses, intrauterine devices, vessel substitutes, artificial ureters and artificial breast tissue.

26. The medical device of claim 25 wherein the medical device is a contact lens.

27. The medical device of claim 26 wherein the medical device is a soft contact lens.